CLAIMS

What is claimed is:

- 10. A device for measuring the unknown empty internal volume of a closed container, void or any other air tight vessel, piping system, or tank comprising: a remotely located regulated pressure of control gas in order to provide volumetric measurement according to Boyle's Law;
 - 11. wherein said gas, in accordance to Claim 10, may be air, elemental or molecular gas or combination of elemental or molecular gases;
 - wherein the regulated pressure of said gas may be varied to adjust for varying environmental and physical conditions;

a remotely located regulated flow controlling device to maintain accuracy of said gas through the gas mass flow sensor;

- 13. wherein said device may be fixed or variable; a remotely located electronic gas mass flow sensor for providing gas volume measurement into the said void; a remotely located digital read-out meter capable of interpreting the raw signal provided by the gas mass flow meter providing direct volume measurement of the said void, closed container or other airtight vessel; whereas the combination of remotely located internal components measures the volume of said closed container, void or any other air tight vessel, piping system, or tank.
- 14. A device for measuring the unknown empty internal volume of a closed container, void or any other air tight vessel, piping system, or tank comprising: a vacuum pump to remove (evacuate) the air from the void, container, piping system or other airtight container;
 - 15. wherein evacuation may be complete (29.92 in HG) or may be partial vacuum

a regulated flow controlling device to maintain accuracy of said gas mass flow sensor;

16. wherein said device may be fixed or variable; a remotely located electronic gas mass flow sensor for providing gas volume measurement from said void; a digital read-out meter capable of interpreting the raw signal provided by the gas mass flow meter providing direct volume measurement of the said void; whereas the combination of remotely located internal components measures the volume of said closed container, void or any other air tight vessel, piping system, or tank.